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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,340	03/29/2001	Yoriaki Matsuzaki	018793-243	8537
7590	10/04/2004		EXAMINER SHOSHO, CALLIE E	
Robert G Mukai Burns Doane Swecker & Mathis PO Box 1404 Alexandria, VA 22313-1404			ART UNIT 1714	PAPER NUMBER

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/806,340	MATSUZAKI ET AL.
	Examiner Callie E. Shosho	Art Unit 1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 22 July 2004.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1,2,6 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,6 and 11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/31/02.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

**Claim Rejections - 35 USC § 112**

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 2, 6, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection is adequately set forth in paragraph 4 of the office action mailed 3/23/04 and is incorporated here by reference.

**Claim Rejections - 35 USC § 103**

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. (U.S. 6,031,019) or Komatsu et al. (U.S. 6,379,443) either of which in view of Ohyama et al. (U.S. 5,359,075).

The rejection is adequately set forth in paragraph 7 of the office action mailed 3/23/04 and is incorporated here by reference.

**Response to Arguments regarding 35 USC 112 rejection**

5. In response to the 35 USC 112, 2<sup>nd</sup> paragraph rejection previously set forth in the office action mailed 3/23/04, applicants amended claims 1, 6, and 11 from “pyridine azo” to “pyridone azo”. However, the scope of the claims remains confusing because formula (2) does not appear to be the correct formula for a pyridone azo. As set forth in the claims as originally filed and page 4 of the present specification, pyridone azo comprises nitrogen in the ring on the right hand side of the formula.

**Response to Arguments regarding 35 USC 103 rejections**

6. Applicants' arguments filed 7/22/04 have been fully considered but they are not persuasive.

Specifically, applicants argue that Ohyama et al. is not a relevant reference against the present claims in light of the amendment to claim 1 which limits both R<sub>4</sub> and R<sub>5</sub> to either linear alkyl group having 10 or more carbon atoms or a branched alkyl group having 8 or more carbon atoms.

Applicants argue that while Ohyama et al. disclose that R<sub>3</sub> is N-substituted aminocarbonyl group, the preferred list of N-substituted aminocarbonyl groups shows longest alkyl substituent on the aminocarbonyl group of octyl while the examples of Ohyama et al. utilize colorant wherein, for the N-aminocarbonyl group CONR<sub>4</sub>R<sub>5</sub>, R<sub>4</sub> is hydrogen and R<sub>5</sub> comprises aminocarbonyl with C<sub>4</sub>, C<sub>6</sub>, or C<sub>7</sub> alkyl groups.

However, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others.” *In re*

*Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). Further, “nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims.” *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960).

It is noted that col.3, lines 25-26 of Ohyama et al. disclose the use of N-substituted aminocarbonyl group having 2-18 carbon atoms which clearly encompasses that presently claimed.

Applicants argue that compound of presently claimed formula (1) with  $R_3$  being  $CONR_4R_5$  in which both  $R_4$  and  $R_5$  are linear alkyl group having 10 or more carbon atoms or a branched alkyl group having 8 or more carbon atoms exhibit excellent characteristics in comparison to those which have linear or branched alkyl groups of shorter length.

As evidence to support their position, applicants point to the Appendix attached to the amendment which summarizes data found in the present specification. The data compares ink comprising dye within the scope of the present claims, i.e. where  $R_3$  is  $CONR_4R_5$  in which both  $R_4$  and  $R_5$  are each  $C_{10}$  or  $C_{12}$  linear alkyl group (examples 30-31) , with ink outside the scope of the present claims but within the scope of the prior art, i.e. where  $R_3$  is  $CONR_4R_5$  in which both  $R_4$  and  $R_5$  are each  $C_8$  linear alkyl groups (example 3). Applicants note that the inventive ink possesses superior characteristics.

However, it is the examiner’s position that the comparative data does not provide unexpected or surprising results over the cited prior art given that there does not appear to be a significant difference between inks comprising presently claimed quinophthalone dye of formula (1) with  $R_3$  being  $CONR_4R_5$  in which both  $R_4$  and  $R_5$  are  $C_{10}$  or  $C_{12}$  linear alkyl group and inks

comprising quinophthalone dyes where  $R_3$  is  $CONR_4R_5$  in which both  $R_4$  and  $R_5$  are  $C_8$  linear alkyl groups.

As set forth in the table in the Appendix, the inventive inks are superior in terms of emulsion condition (Evaluation A), image recording density (Evaluation C), storage stability (Evaluation F-1), and clogging (Evaluation F-2). However, using the criteria for these evaluations as set forth on pages 60-63 of the present specification, there appears to be little if any difference between the inventive inks and the comparative ink.

Specifically, for Evaluation A, the inventive ink rates @ indicating good emulsion condition. While the comparative ink rates o, which indicates floating matter is slightly observed, it is also disclosed (page 61, lines 1-2), that this is "not problematic". For evaluation C, the inventive ink rates @ indicating recording density of 1.1 or more while the comparative ink rates o which indicates recording density of 1.0 to less than 1.1. Thus, the difference between the inventive inks and the comparative ink can be less than 0.01, i.e. recording density of 1.1 versus recording density of 1.09, 1.095, 1.099, etc. For evaluation F-1, the inventive ink rates o indicating no problem without any precipitate or floating matter while the comparative ink rates  $\Delta$  indicating floating matter is only "slightly" observed. For evaluation F-2, the inventive ink rates o indicating normal. While the comparative ink rates  $\Delta$ , this only indicates there is clogging, but that it is "negligible".

Thus, it is the examiner's position that the data does not provide clear and convincing evidence of patentability of the present claims over the cited prior art.

Applicants also maintain their previous argument that there is no motivation to combine Tsutsumi et al. or Komatsu et al. with Ohyama et al. given that Ohyama et al. is drawn to

significantly different technical field, i.e. liquid crystal materials, than Tsutsumi et al. or Komatsu et al., which are drawn to inks.

However, the examiner's position remains that while Ohyama et al. do disclose the use of the dyes in liquid crystal materials, Ohyama et al. also additionally disclose the use of the dyes to color polymeric material. This use is especially relevant to the present invention which requires resin colored with quinophthalone dye as well as to either Tsutsumi et al. or Komatsu et al., with which Ohyama et al. is combined, which each are drawn to inks containing colored resin. It is the examiner's position that there is proper basis and motivation to combine Tsutsumi et al. or Komatsu et al. with Ohyama et al.

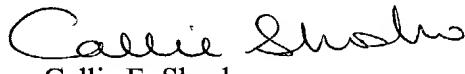
7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
9/30/04